



Energy Future System Operator

Response form

The consultation is available at: <https://www.gov.uk/government/consultations/proposals-for-a-future-system-operator-role>

The closing date for responses is 28th September 2021

Please return completed forms to:

System Operator Team
Department for Business, Energy and Industrial Strategy
Abbey 1, 3rd Floor,
1 Victoria Street
London
SW1H 0ET

AND

Future System Operation
Office of Gas and Electricity Markets
10, South Colonnade
Canary Wharf London
E14 4PU

Email: futuresystemoperator@beis.gov.uk

Personal / Confidential information

Please be aware that we intend to publish a summary of all responses to this consultation.

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

Ofgem will publish non-confidential responses (or parts of response) on its website. If you want your response in whole or in part to be considered confidential, please tell us in your response and say why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

Please be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our privacy policy.

All responses will be processed by BEIS and Ofgem as this is a joint consultation.

We will summarise all responses and publish this summary on GOV.UK. The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

I want my response to be treated as confidential ☐

Comments: [Click here to enter text.](#)

About You

Name: **Gregory Edwards**

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	Respondent type
<input type="checkbox"/>	Business representative organisation/trade body
<input type="checkbox"/>	Central government
<input type="checkbox"/>	Charity or social enterprise
<input type="checkbox"/>	Individual
<input checked="" type="checkbox"/>	Large business (over 250 staff)
<input type="checkbox"/>	Legal representative
<input type="checkbox"/>	Local government
<input type="checkbox"/>	Medium business (50 to 250 staff)
<input type="checkbox"/>	Micro business (up to 9 staff)
<input type="checkbox"/>	Small business (10 to 49 staff)
<input type="checkbox"/>	Trade union or staff association
<input type="checkbox"/>	Other (please describe)

Questions

Chapter 2

Questions in this section relate to

- The case for change

Question 1

Do you agree that net zero will create the need for new technical roles in the electricity and gas systems, and require a new approach to for energy system governance?

A ☒ **Yes** ☐ **No**

B

If not please explain why:

-

Question 2

Do you agree that the establishment of a Future System Operator is needed to fulfil the kinds of technical roles needed to drive net zero?

A ☒ **Yes** ☐ **No**

B

If not please explain why:

-

Question 3

Do you agree that a Future System Operator should have roles in both the electricity and gas systems?

A ☒ Yes ☐ No

B

If not please explain why:

-

Question 4

Do you agree that a Future System Operator should be entirely separate from National Grid plc?

A ☒ Yes ☐ No

B

If not please explain why:

-

Question 5

What issues are there with existing institutional arrangements in the UK energy system in relation to system-wide decision-making and planning?

Please provide your answer below:

A weakness of the existing institutional arrangements relates to the delivery of whole system solutions. For example, in the RIIO-2 energy network price controls, the Coordinated Adjustment Mechanism allows expenditure allowances and outputs to be re-

allocated to other network companies in the event a whole system solution is identified during the price control and is different to the network solution originally envisaged. However, there is no mechanism that compels network companies to participate in the delivery of whole system solutions. This means that, in theory, a whole system solution may not be delivered even if it is identified.

Another weakness is the 'layering' of activities aimed at the strategic development of network but without sufficient coordination across those activities. The Network Options Assessment, the offshore electricity network transmission review and the onshore electricity transmission network review are aimed at the improving the strategic planning and development of the electricity transmission network but there does not yet appear to be a holistic view taken across these activities. A holistic view is needed given the significant interdependencies e.g. landing points for offshore networks could materially affect where and how the capacity of onshore infrastructure should be expanded.

Question 6

What examples/case studies are you aware of where net zero delivery in one part of the energy system did not adequately account for cross-system impacts or costs?

Please provide your answer below:

We note there has been a steady and significant increase in electricity system balancing costs in recent years, as the penetration of generation from renewable sources has increased. We estimate the ESO (Electricity System Operator) will have spent about £1.16bn balancing the system during the first half of the 2021/22 financial year, compared to about £687m during the first half of the 2019/20 financial year. At this stage, it is not clear whether the impact of the increasing penetration of renewable generation on balancing costs has been adequately accounted for.

Question 7

Where should government focus in our efforts to improve systems thinking and coordination across the energy system?

Please provide your answer below:

The Government's efforts should be focussed on those areas that will increase the coordination of network planning and development so that the investment necessary to facilitate Net Zero in a timely manner is progressed and so that only efficient levels of investment are undertaken. These areas include:

- Greater coordination of network development such as a holistic view taken the onshore and offshore electricity transmission network reviews,
- Ensuring the ESO/FSO continues to develop and implement markets for ancillary services at pace, necessary to support the increasing penetration of renewable generation and for lower carbon ancillary services to be provided.
- Thoroughly investigating how the FSO can take on some roles relating to distribution system operation (DSO), to avoid inefficiency associated with conflicts of interest that arise of Distribution Network Operators (DNOs) undertaking DSO.
- Development of the necessary arrangements for the use of hydrogen.

Chapter 3

Questions in this section relate to

- What existing, enhanced and new roles and functions we consider a Future System Operator is well placed to take on to drive the transition to net zero.

Question 8

Do you agree that the FSO should undertake all the existing roles and functions of NGESO?

A

☒ **Yes**

☐ **No**

B

If not please explain why:

We support the FSO undertaking all the existing roles and functions of the ESO, including that of code manager. In the concurrent joint Ofgem/BIES consultation on the design and delivery of energy code reform, it has been suggested the FSO could act as the Integrated Rule-Making Body (IRMB) - fulfilling both the strategic function and code manager functions.

We do not support the FSO taking on dual roles as the IRMB because we think:

- it is highly unlikely that the FSO could be structured in a way that the strategic function would be sufficiently independent in order to carry out reviews of decisions made by the code manager function; and
- delivering strategic change would become more complex and more difficult to achieve in a timely manner if strategic function responsibilities are split between Ofgem and the IRMB.

Question 9

Do you agree there is a case for the FSO to undertake the gas strategic functions outlined in Option 1?

A

☒ Yes

☐ No

B

If not please explain why:

-

Question 10

Do you agree that there is not currently a case for the FSO to undertake all GSO roles and functions, including real time gas system operation, as outlined in Option 2?

A

☒ Yes

☐ No

B

If not please explain why:

-

Chapter 3- New and enhance FSO roles

Questions in this section relate to

- 3.2 in the FSO Consultation

Question 11

Do you have views on the proposal for an advisory role? What organisations do you consider would benefit from the provision of advice by the FSO?

Please provide your answer below

Given its strategic, central role, it would be appropriate for the FSO to provide independent, expert advice to public and decision-making organisations.

Who should bear the costs of providing that advice?

-

Question 12

Do you have any views on the other areas where we are considering new and enhanced roles and functions for the FSO (outlined in section 3.2)?

Please elaborate:

Advisory role:

Given its strategic, central role, it would be appropriate for the FSO to provide independent, expert advice to public and decision-making organisations.

Dispute resolution:

We do not agree the FSO should be involved in dispute resolution. Dispute resolution is an operational matter, which does not wholly align with the intention to design the FSO to be an entity meant to coordinate the strategic development of energy networks.

System planning and network development:

We agree the FSO should take on new and enhanced functions in co-ordination and strategic system planning and network development, with a focus on the energy system as a whole. This should include distribution and transmission networks as well as offshore electricity networks.

Driving competition in energy networks:

It would be appropriate for the FSO on new and enhanced functions in relation to driving competition in energy networks. This would be an evolution of the ESO's existing responsibilities

Energy Market Design:

The ESO is currently responsible for the design and implementation of markets for ancillary and balancing services. This responsibility should be transferred to the FSO.

The case has not been made for the responsibility for the design of other energy markets to be assigned to the FSO. However, the FSO should act in an advisory role, as the ESO currently does for some markets. As an example, the ESO currently advises the Secretary of State on the capacity that should be procured via Capacity Market auctions.

Coordination with Distribution Networks:

We believe robustly addressing conflicts of interest at the distribution level is equally as important as at the transmission level - inefficiency caused by potential conflicts of interest can occur at both network levels. Greater coordination of network planning and development could result in whole system solutions that span the transmission-distribution boundary becoming more commonplace. It is not in consumers' interests to aim to address inefficiency at one network and not the other given both play important roles in facilitating decarbonation. It is for this reason we welcome the proposal that the FSO, which is independent of the DNOs, could take on distribution system operation functions. Further, the Government should consider the extent to which similar stand-alone, independent system operators and/or other sufficiently robust mitigation to address conflicts of interest at the distribution level could reduce inefficiency.

Heat and transport decarbonisation:

We agree the FSO could play a greater role in providing advice and potentially coordinating elements of heat and transport decarbonisation.

Data:

We support the FSO being assigned roles and functions relating to energy data as set out in the consultation.

Future system operability, engineering standards and energy code development:

As discussed in our response to question 8, we do not support the FSO being appointed as the Integrated Rule-Making Body (IRMB) because:

- it is highly unlikely that the FSO could be structured in a way that the strategic function would be sufficiently independent in order to carry out reviews of decisions made by the code manager function; and
- delivering strategic change would become more complex and more difficult to achieve in a timely manner if strategic function responsibilities are split between Ofgem and the IRMB.

Nevertheless, it could be appropriate for the FSO to continue to act as code manager and to monitor and proactively recommend changes to electricity and gas codes and engineering standards that it believes could affect future system operability, resilience, decarbonisation, or system cost.

We support the FSO being given the responsibility for publishing an annual statement of system performance and assessment of system health for the whole electricity system.

Hydrogen/CCUS:

We agree the FSO should be given the responsibilities in these areas as set out in the consultation.

Chapter 4

Questions in this section relate to

Organisation Design

- The high-level characteristics and detailed attributes which we consider are needed to achieve this, and seeks views on two different organisational models and the extent to which they meet these characteristics and attributes.

Question 13

What are your views on our proposed characteristics and attributes of a future system operator and how the models presented would deliver against them?

Please provide your answer below

The proposed characteristics and attributes of a future system operator are appropriate.

Are there other characteristics or attribute that we have not yet considered?

-

Question 14

Are we considering the right organisation models for the FSO? And why?

Please provide your answer below

We believe the right organisation models for the FSO are being considered.

Question 15

Are we considering the right elements for the FSO's regulatory and accountability frameworks? And why?

Please provide your answer below

The right elements for the FSO's regulatory and accountability frameworks are being considered.

Question 16

Do you have views on the level of shareholding or control involving other 'energy interests' and the FSO at which a conflict of interest would become a concern?

Please provide your answer below

-

Question 17

Are we considering the right implications of our proposals for Elexon and Xoserve?

Please provide your answer below

The right implications for Elexon and Xoserve are being considered.

Chapter 5

Questions in this section relate to

Implementation

- A preferred high-level approach for implementation of the FSO with the aim of seeking views on how the FSO can best implemented in practice

Question 18

What is your view on the preferred implementation approach?

Please explain why

The preferred implementation approach is reasonable – the ESO being transitioned to the FSO and then the FSO then adopting new and enhanced roles and responsibilities.

It is likely that significant industry resources will be diverted to delivering the implementation. It is necessary that the implementation is managed in such a way that it progresses at pace but does not unduly disrupt other areas of activity within the industry. Also, it could be beneficial if the ESO/FSO is allowed to be adequately resourced for delivering the new and enhanced functions (e.g. planning of carbon capture and storage networks) ahead of formal assignment of those roles and functions.

Question 19

Based on the areas where we are considering new and enhanced roles and functions for the FSO, which of these should be prioritised for development?

Please explain why

The Government's efforts prioritise those areas that will increase the coordination of network planning and development so that the investment necessary to facilitate Net Zero in a timely manner is progressed and so that only efficient levels of investment are undertaken. These areas include:

- Greater coordination of network development such as a holistic view taken the onshore and offshore electricity transmission network reviews,
- Ensuring the ESO/FSO continues to develop and implement markets for ancillary services at pace, necessary to support the increasing penetration of renewable generation and for lower carbon ancillary services to be provided.
- Thoroughly investigating how the FSO can take on some roles relating to DSO, to avoid inefficiency associated with conflicts of interest that arise of DNOs undertaking DSO.
- Development of the necessary arrangements for the use of hydrogen.

Question 20

What do you believe are the risks to implementation?

Please provide your answer below

We believe the main risk to implementation is a significant amount of industry resource and time will be required, while supporting other industry initiatives and operation in parallel.

How can these be mitigated?

-

Question 21

Do you have any comments on potential implications of implementation for you, your organisation, or other stakeholders?

Please provide your answer below

-

Chapter 6

Questions in this section relate to

Impact assessment

- FSO Impact assessment which is presented alongside this consultation to assess the likely costs, benefits and distributional impacts of the policy options considered

Question 22

What is your view on the position there are likely to be cost savings across the energy system from an increased “whole system” view, as described in paragraphs 50-55 of the IA?

A

Please provide your answer below

We agree, there are likely to be cost savings across the energy system from an increased “whole system” view.

B

If so, is the potential magnitude of savings illustrated fairly in the IA?

If not, why not?

-

Question 23

What is your view on the conclusion that policy intervention is likely to increase the benefits of onshore electricity network competition, as described in paragraphs 53-59 of the IA? If you agree, is the potential magnitude of savings illustrated fairly in the IA? If not, why not?

A

Please provide your answer below

-

B

If not, why not?

-

Question 24

Do you think that the impact assessment has identified and considered the key costs and benefits of policy intervention?

A

☒ **Yes**

☐ **No**

B

If not, can you provide details on other impacts that have not been considered?

-

Question 25

Do you think that the distribution of impacts is fairly represented, with impacted groups correctly identified? Outlined in table 5 of the IA.

A

☐ **Yes**

☐ **No**

B

If not, why not?

-

Question 26

We invite respondents' views on whether the proposals for energy system governance reform may have a different impact on people who have a protected characteristic (age, disability, gender re-assignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex (gender) or sexual orientation), in different ways from people who don't have that characteristic.

Please provide any evidence that may be useful to assist with our analysis of policy impacts.

-

Do you have any other comments that might aid the consultation process as a whole?

Please use this space for any general comments that you may have, comments on the layout of this consultation would also be welcomed.

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Thank you for your views on this consultation.

Thank you for taking the time to let us have your views. We do not intend to acknowledge receipt of individual responses unless you tick the box below.

Please acknowledge this reply ☒

At BEIS we carry out our research on many different topics and consultations, and your views are valuable to us. Would you be happy for us to contact you again from time to time either for research or about other consultations?

☒ Yes

☐ No